



# AMMONIUM HYDROXIDE

UN 2672 (10 to 35% Ammonia in water)

UN 2073 (35 to 50% Ammonia in water)

Shipping Name: Ammonia Solutions

Other Names: Ammonia monohydrate  
Ammonia solution

Ammonia water  
Aqueous ammonia



## Hazards:

- Severely irritating to skin, eyes, nose and lungs; skin and eye contact can cause severe burns and blindness
- Fire fighting gear (including SCBA) does not provide adequate protection. If exposure occurs, remove and isolate gear immediately and thoroughly decontaminate personnel
- May burn or explode in closed spaces (e.g., tanks, sewers, buildings)
- Decomposes upon heating to produce toxic ammonia and nitrogen oxide gases
- Vapors are lighter than air but may hug the ground when cool

## Awareness and Operational Level Training Response:

- **Do not put yourself in danger by entering a contaminated area to rescue a victim**
- Stay upwind and uphill
- Determine the extent of the problem
- Isolate the area of release or fire and deny entry
- Evacuate or shelter in place the immediate area and downwind for a large release
- For container exposed to fire evacuate the area in all directions because of the risk of BLEVE
- Notify local health and fire officials and pollution control agencies
- If material or contaminated runoff enters waterways, notify downstream users of potentially contaminated water

## Description:

- Colorless to milky white colored liquid
- Ammonia-like odor
- Soluble in water
- Flammable
- Vapors are lighter than air but may hug the ground when cool

## Operational Level Training Response:

### RELEASE, NO FIRE:

- Stop the release if it can be done safely from a distance
- Prevent material and runoff from entering sewers and waterways if it can be done safely well ahead of the release
- Use large amounts of water to disperse vapors - contain runoff
- Ventilate confined area if it can be done without placing personnel at risk

### FIRE:

- Material does not easily burn; fight surrounding fire with an agent appropriate for the burning material
- Cool exposed containers with large quantities of water from unattended equipment or remove intact containers if it can be done safely
- If cooling streams are ineffective (unvented container distorts, bulges or shows any other sign of expanding), withdraw immediately to a secure location

## First Aid:

- **Do not put yourself in danger by entering a contaminated area to rescue a victim**
- Provide Basic Life Support/CPR as needed
- Decontaminate the victim as follows:
  - ◆ Inhalation - remove the victim to fresh air and give oxygen if available
  - ◆ Skin - remove and isolate contaminated clothing (including shoes) and wash skin with soap and large volumes of water for 15 minutes
  - ◆ Eye - rinse eyes with large volumes of water or saline for 15 minutes
  - ◆ Swallowed - do not make the victim vomit
- Seek medical attention
- For skin burns decontaminate with water and apply a clean dry dressing

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